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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,717	02/11/2002	Dean M. Willard	PIA-10302/04	5678

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EXAMINER	
HANDY, DWAYNE K	
ART UNIT	**PAPER NUMBER**
1797	

MAIL DATE	DELIVERY MODE
12/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/073,717	WILLARD ET AL.	
	Examiner	Art Unit	
	Dwayne K. Handy	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) *7,8,10 and 11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,9 and 12-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-6, 9 and 12-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites an article *"for chemical reactant delivery to between a first metal substrate to a second substrate as part of a polymerization reaction"* in the preamble, and then recites the limitation of **"at least one of the first metal substrate and the second substrate receiving said chemical reactant from said applicator prior to the first substrate and the second substrate being brought into contact to initiate anaerobic polymerization therebetween, wherein the second substrate is a material selected from the group consisting of glass and metal"** in the body of the claim. The limitation(s) in the claim body directed to the first and second substrate(s) is unclear. Applicant has claimed an article "for chemical reactant delivery to between a first metal substrate to a second substrate"; the article is comprised of an applicator pre-moistened with a chemical reactant and a chemical reactant package having a pouch adapted to enclose the applicator. Applicant has not claimed a first or second substrate, therefore placing a limitation on the materials for the second substrate is unclear. Furthermore, the limitations for the substrates appear to be directed to an intended use or method step in using the applicator ("at least one of [the substrates] receiving said chemical reactant from said

applicator... to initiate polymerization.."). The Examiner reminds Applicant that an apparatus (article) is defined by its structure and not be its intended use.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 6, 9, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Mainwaring et al. (6,779,657). Mainwaring teaches an applicator assembly. The assembly is best shown in Figures 1-3 and described in column 6. The assembly includes an applicator (20) with a swab (21) portion having a chemical reactant (col. 6, lines 56-63) and a package comprised of a tray (10) having an affixed cover (26). The tray includes portions (16, 18) for attaching the applicator to the package. Mainwaring discloses the use of organometallic compounds including tin compounds in column 24, lines 1-24.

Inventorship

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mainwaring et al. (6,779,657) in view of Boeder (4,373,077). Mainwaring teaches every element of claims 14-16 except for the copper compounds. Boeder teaches

anaerobically curing polymer compositions. The composition includes activator compounds comprised of copper (column 8, lines 1-22). In column 7, lines 51-68, Boeder teaches that the copper compounds are preferred when the polymerization is to occur on non-reactive metal or non-metal surfaces. It would have been obvious to one of ordinary skill in the art to combine the copper compounds from Boeder with the applicator assembly of Mainwaring. One would use the copper activators to allow for bonding operations involving inactive metal or non-metal substrates as taught by Boeder.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mainwaring et al. (6,779,657) in view of Spinu et al. (5,210,108). Mainwaring teaches every element of claim 5 except for the lanthanide compound. Spinu teaches a polymerization process. In describing the process, Spinu discloses that tin octanoate is generally used as the catalyst, but that lanthanide series compounds may be used as well (column 4, lines 15-39). Mainwaring also discloses the use of tin octanoate. The Examiner considers these compounds to be functional equivalents and that it would be obvious to one of ordinary skill in the art to substitute the lanthanide compound for the tin compound based on Spinu's teachings that both the catalysts may be used in the polymerization processes. See MPEP 2144.06.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. D'Alessio et al. (6,802,416) also teaches an applicator having polymerization compounds.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DKH
December 21, 2007

Jill Warden
Supervisory Patent Examiner
Technology Center 1700